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Abstract: A sound source apparatus having operation blocks composed of softwares used to compute waveforms for

generating a plurality of musical tones through a plurality of channels according to performance information, the apparatus comprising:

a setting device for setting an algorithm which determines a system composed of selective ones of the operation blocks systematically combined with each other to compute a waveform specific to one of the musical tones;

a designating device responsive to the performance information for designating one of the channels to be used for generating said one musical tone; and

a generating device for allocating the selective operation blocks to said one channel and for systematically executing the allocated selective operation blocks according to the algorithm so as to compute the waveform to thereby generate said one musical tone through said one channel.

2. A sound source apparatus according to claim 1, wherein the setting device sets different algorithms which determine different systems corresponding to different timbres of the musical tones, each of the different systems being composed of selective ones of the operation blocks which are selectively and sequentially combined with each other to compute a waveform which is specific to a corresponding one of the different timbres.

3. A sound source apparatus according to claim 2, wherein the setting device comprises a determining device that determines a first system combining a great number of operation blocks and corresponding to a regular timbre and that determines a second system combining a small number of operation blocks and corresponding to a substitute timbre, and a changing device operative when a number of operation blocks executable in the channel is limited under said great number and over said small number due to a load of the computation of the waveform for changing the musical tone from the regular timbre to the substitute timbre so that the second system is adopted for the channel in place of the first system.

4. A sound source apparatus according to claim 1, wherein the setting device comprises an adjusting device operative dependently on a condition during the course of generating the musical tone for adjusting a number of the operation blocks to be allocated to the channel.

5. A sound source apparatus according to claim 4, wherein the adjusting device comprises a modifying device that modifies the algorithm to eliminate a predetermined one or more of the operation blocks involved in the system so as to reduce a number of the operation blocks to be loaded into the channel for adjustment to the condition.

6. A sound source apparatus according to claim 4, wherein the adjusting device operates when the condition indicates that an amplitude envelope of the waveform increases below a predetermined threshold level for compressing the system so as to reduce the number of the operation blocks.

7. A sound source apparatus according to claim 4, wherein the adjusting device operates when the condition indicates that an output volume of the musical tone is raised below a predetermined threshold level for compressing the system so as to reduce the number of the operation blocks.

8. A sound source apparatus according to claim 4, wherein the adjusting device operates when the condition indicates that at least one of the operation blocks declines to become inactive in the system without substantially affecting other operative blocks of the system for eliminating said at least one operation block so as to reduce the number of the operation blocks to be allocated to the channel.

9. A sound source apparatus according to claim 1, wherein the generating device comprises a computing device respon-

sive to a variable sampling frequency for executing the operation blocks to successively compute samples of the waveform in synchronization to the variable sampling frequency so as to generate the musical tone, and a controlling device that sets the variable sampling frequency according to process of computation of the waveform by the operation blocks.

10. A sound source apparatus according to claim 1, wherein the generating device comprises a computing device responsive to a variable sampling frequency for executing the operation blocks to successively compute samples of the waveform in synchronization to the variable sampling frequency so as to generate the musical tone, and a controlling device for adjusting the variable sampling frequency dependently on a load of computation of the waveform during the course of generating the musical tone.

11. A sound source apparatus according to claim 1, wherein the generating device comprises a computing device responsive to a variable sampling frequency for executing the operation blocks to successively compute samples of the waveform in synchronization to the variable sampling frequency so as to generate the musical tone, and a controlling device for adjusting the variable sampling frequency according to result of computation of the samples during the course of generating the musical tone.

12. A sound source apparatus according to claim 1, wherein the generating device comprises a computing device responsive to a variable sampling frequency for executing the operation blocks to successively compute samples of the waveform in synchronization to the variable sampling frequency so as to generate the musical tone, and a controlling device for adjusting the variable sampling frequency dependently on a load of computation during the course of generating the musical tone.

13. A sound source apparatus having a software module used to compute samples of a waveform in response to a sampling frequency for generating a musical tone according to performance information, the apparatus comprising:

a processor device that periodically executes the software module for successively computing samples of the waveform corresponding to a variable sampling frequency so as to generate the musical tone;

a detector device for detecting a load of computation imposed on the processor device during the course of generating the musical tone; and

a controller device operative according to the detected load for changing the variable sampling frequency to adjust a rate of computation of the samples.

14. A sound source apparatus according to claim 13, wherein the controller device provides a fast sampling frequency when the detected load is relatively light, and provides a slow sampling frequency when the detected load is relatively heavy such that the rate of the computation of the samples is reduced by 1/n where n denotes an integer number.

15. A sound source apparatus according to claim 14, wherein the processor device includes a delay device having a memory for imparting a delay to the waveform to determine a pitch of the musical tone according to the performance information, the delay device generating a write pointer for successively writing the samples into addresses of the memory and a read pointer for successively reading the samples from addresses of the memory to thereby create the delay corresponding to an address gap between the write pointer and the read pointer, the delay device being responsive to the fast sampling frequency to increment both of the write pointer and the read pointer by one address for one

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sample, otherwise the delay device being responsive to the slow sampling frequency to increment the write pointer by one address a times for one sample and to increment the read pointer by a addresses for one sample.

16. A sound source apparatus according to claim 14, wherein the processor device includes a delay device having a pair of memory regions for imparting a delay to the waveform to determine a pitch of the musical tone according to the performance information, the delay device successively writing the samples of the waveform of one musical tone into addresses of one of the memory regions and successively reading the samples from addresses of the same memory region to thereby create the delay, the delay device being operative when said one musical tone is switched to another musical tone for successively writing the samples of the waveform of said another musical tone into addresses of the other memory region and successively reading the samples from addresses of the same memory region to thereby create the delay while clearing the one memory region to prepare for a further musical tone.

17. A sound source apparatus according to claim 13, wherein the processor device executes the software module composed of a plurality of sub-modules for successively computing the waveform, the processor device being operative when one of the sub-modules declines to become inactive without substantially affecting other sub-modules during computation of the waveform for skipping execution of said one sub-module.

18. A sound source apparatus according to claim 14, wherein the processor device includes a delay device having a memory for imparting a delay to the waveform to determine a pitch of the musical tone according to the performance information, the delay device generating a write pointer for successively writing the samples into addresses of the memory and a read pointer for successively reading the samples from addresses of the memory to thereby create the delay corresponding to an address gap between the write pointer and the read pointer, the delay device being responsive to the fast sampling frequency to increment both of the write pointer and the read pointer by one address for one sample, otherwise the delay device being responsive to the slow sampling frequency to increment the write pointer by one address a times for one sample.

19. A sound source apparatus according to claim 14, wherein the processor device includes a delay device for imparting a delay to the waveform to determine a pitch of the musical tone according to the performance information, the delay device successively writing the samples of the waveform of one musical tone into addresses of one memory region of the delay device and successively reading the samples from addresses of said one memory region to thereby create the delay, the delay device being operative when said one musical tone is switched to another musical tone for successively writing the samples of the waveform of said another musical tone into addresses of another memory region of the delay device and successively reading the samples from addresses of said another memory region to thereby create the delay while clearing said one memory region to prepare for a further musical tone.

20. A sound source apparatus having a software module used to compute samples of a waveform for generating a musical tone, the apparatus comprising:

a provider device for variably providing a trigger signal at a relatively slow rate to define a frame period between successive trigger signals, and for periodically providing a sampling signal at a relatively fast rate such that a plurality of sampling signals occur within one frame period;

a processor device reselectable in response to each trigger signal and operable to periodically execute the software module for successively computing a number of samples of the waveform corresponding to the sampling signals within one frame;

a detector device for detecting a load of computation imposed on the processor device during the course of generating the musical tone;

a controller device operative according to the detected load for varying the frame period to adjust the number of the samples computed within one frame period, and a converter device responsive to each sampling signal for converting each of the samples into a corresponding analog signal to thereby generate the musical tone.

21. A sound source apparatus having submodules composed of software used to compute waveforms for generating a plurality of musical tones through a plurality of channels according to performance information, the apparatus comprising:

setting means for setting an algorithm which determines a module composed of selective ones of the submodules logically connected to each other to compute a waveform specific to one of the musical tones;

designating means responsive to the performance information for designating one of the channels to be used for generating said one musical tone; and

generating means for loading the selective submodules into said one channel and for logically executing the allocated selective submodules according to the algorithm so as to compute the waveform to thereby generate said one musical tone through said one channel.

22. A sound source apparatus according to claim 21, wherein the setting means sets different algorithms which determine different modules corresponding to different timbres of the musical tones, each of the different modules being composed of selective ones of the submodules which are selectively and sequentially connected to each other to compute a waveform which is specific to a corresponding one of the different timbres.

23. A sound source apparatus according to claim 21, wherein the setting means comprises adjusting means operative dependently on a condition during the course of generating the musical tone for adjusting a number of the submodules to be loaded into the channel.

24. A sound source apparatus according to claim 21, wherein the adjusting means operates when the condition indicates that an amplitude envelope of the waveform straggles below a predetermined threshold level for compacting the module so as to reduce the number of the submodules.

25. A sound source apparatus according to claim 21, wherein the adjusting means operates when the condition indicates that an output volume of the musical tone is tuned below a predetermined threshold level for compacting the module so as to reduce the number of the submodules.

26. A sound source apparatus according to claim 21, wherein the adjusting means operates when the condition indicates that one of the submodules loses contribution to computation of the waveform without substantially affecting other submodules for eliminating said one submodule so as to reduce the number of the submodules to be loaded into the channel.

27. A sound source apparatus having a software module used to compute samples of a waveform in response to a sampling frequency for generating a musical tone according to performance information, the apparatus comprising:

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processor means to periodically execute the software module for successively computing samples of the waveform corresponding to a variable sampling frequency so as to generate the musical tone;

detector means for detecting a load of computation imposed on the processor means during the course of generating the musical tone; and

controller means operative according to the detected load for changing the variable sampling frequency to adjust a rate of computation of the samples.

28. A sound source apparatus according to claim 27, wherein the controller means provides a fast sampling frequency when the detected load is relatively light, and provides a slow sampling frequency when the detected load is relatively heavy such that the rate of the computation of the samples is reduced by the whole or a fraction of an integer number.

29. A sound source apparatus according to claim 28, wherein the processor means includes delay means having a memory for imparting a delay to the waveform to determine a pitch of the musical tone according to the performance information, the delay means generating a write pointer for successively writing the samples into addresses of the memory and a read pointer for successively reading the samples from addresses of the memory to thereby create the delay corresponding to an address interval between the write pointer and the read pointer, the delay means being responsive to the fast sampling frequency to increment both of the write pointer and the read pointer by every one address for every one sample, otherwise the delay means being responsive to the slow sampling frequency to increment the write pointer by every one address at a time for repeatedly writing one sample into consecutive addresses.

30. A sound source apparatus according to claim 28, wherein the processor means includes delay means having a memory for imparting a delay to the waveform to determine a pitch of the musical tone according to the performance information, the delay means generating a write pointer for successively writing the samples into addresses of the memory and a read pointer for successively reading the samples from addresses of the memory to thereby create the delay corresponding to an address interval between the write pointer and the read pointer, the delay means being responsive to the fast sampling frequency to increment both of the write pointer and the read pointer by every one address for every one sample, otherwise the delay means being responsive to the slow sampling frequency to increment the write pointer by every one address at a time for repeatedly writing one sample into consecutive addresses and to skip the read pointer by consecutive addresses for reading one sample.

31. A sound source apparatus having a software module used to compute samples of a waveform for generating a musical tone, the apparatus comprising:

provider means for variably providing a trigger signal at a relatively slow rate to define a frame period between successive trigger signals, and for periodically providing a sampling signal at a relatively fast rate such that a plurality of sampling signals occur within one frame period;

processor means resettable in response to each trigger signal and operable based on each sampling signal to periodically execute the software module for successively computing a number of samples of the waveform within one frame period;

detector means for detecting a load of computation imposed on the processor means during the course of generating the musical tone;

controller means operative according to the detected load for varying the frame period to adjust the number of the samples computed within one frame period; and

converter means responsive to each sampling signal for converting each of the samples into a corresponding scaling signal to thereby generate the musical tones.

32. A sound source apparatus having a software module used to compute samples of a waveform for generating a musical tone, the apparatus comprising:

provider means for periodically providing a trigger signal at a relatively slow rate to define a frame period between successive trigger signals, and for periodically providing a sampling signal at a relatively fast rate such that a plurality of sampling signals occur within one frame period;

processor means resettable in response to a trigger signal and operable in response to each sampling signal to periodically execute the software module for successively computing a number of samples of the waveform within one frame period; and

converter means responsive to each sampling signal for converting each of the samples into a corresponding scaling signal to thereby generate the musical tones, wherein

the processor means includes delay means having a pair of memory regions for imparting a delay to the waveform to determine a pitch of the musical tone according to the performance information, the delay means successively writing the samples of the waveform of one musical tone into addresses of one of the memory regions and successively reading the samples from addresses of the same memory region to thereby create the delay, the delay means being operative when the processor means is reset so that said one musical tone is switched to another musical tone for successively writing the samples of the waveform of said another musical tone into addresses of the other memory region and successively reading the samples from addresses of the same memory region to thereby create the delay while clearing the one memory region to prepare for a further musical tone.

33. A method using submodules composed of softwares to compute waveforms for generating a plurality of musical tones through a plurality of channels according to performance information, the method comprising the steps of:

setting an algorithm which determines a module composed of selective ones of the submodules logically connected to each other to compute a waveform specific to one of the musical tones;

designating one of the channels to be used for generating said one musical tone in response to the performance information;

loading the selective submodules from said one channel; and

logically executing the loaded selective submodules according to the algorithm so as to compute the waveform to thereby generate said one musical tone through said one channel.

34. A method according to claim 33, wherein the step of setting sets different algorithms which determine different timbres corresponding to different timbres of the musical tones, each of the different modules being composed of selective ones of the submodules which are selectively and sequentially connected to each other to compute a waveform which is specific to a corresponding one of the different timbres.

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33. A method according to claim 33, wherein the step of setting comprises adjusting a number of the submodules to be loaded into the channel dependently on a condition during the course of generating the musical tone.

34. A method according to claim 33, wherein the step of adjusting comprises compensating the module so as to reduce the number of the submodules when the condition indicates that an amplitude envelope of the waveform accurately below a predetermined threshold level.

35. A method according to claim 33, wherein the step of adjusting comprises compensating the module so as to reduce the number of the submodules when the condition indicates that an output voltage of the musical tone is tuned below a predetermined threshold level.

36. A method according to claim 33, wherein the step of adjusting comprises eliminating at least one submodule so as to reduce the number of the submodules to be loaded into the channel when the condition indicates that said at least one submodule does not contribute to computation of the waveform without substantially affecting other submodules.

39. A method using a hardware processor and a software module to compute samples of a waveform in response to a sampling frequency for generating a musical tone according to performance information, the method comprising the steps of:

periodically operating the hardware processor to execute the software module for successively computing samples of the waveform corresponding to a variable sampling frequency so as to generate the musical tone; detecting a load of computation imposed on the hardware processor during the course of generating the musical tone; and

changing the variable sampling frequency according to the detected load to adjust a rate of computation of the samples.

40. A method according to claim 39, wherein the step of changing provides a fast sampling frequency when the detected load is relatively light, and provides a slow sampling frequency when the detected load is relatively heavy.

41. A method using a hardware processor having a software module used to compute samples of a waveform for generating a musical tone, the method comprising the steps of:

variably providing a trigger signal at a relatively slow rate to define a frame period between successive trigger signals;

periodically providing a sampling signal at a relatively fast rate such that a plurality of sampling signals occur within one frame period;

operating the hardware processor resettable in response to each trigger signal and operable based on each sampling signal to periodically execute the software module for successively computing a number of samples of the waveform within one frame period;

detecting a load of computation imposed on the software processor during the course of generating the musical tone;

varying the frame period according to the detected load to adjust the number of the samples computed within one frame period; and

converting each of the samples into a corresponding analog signal in response to each sampling signal to thereby generate the musical tone.

42. A method using a hardware processor having a software module used to compute samples of a waveform for generating a musical tone, the method comprising the steps of:

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periodically providing a trigger signal at a relatively slow rate to define a frame period between successive trigger signals;

periodically providing a sampling signal at a relatively fast rate such that a plurality of sampling signals occur within one frame period;

operating the hardware processor resettable in response to a trigger signal and operable based on each sampling signal to periodically execute the software module for successively computing a number of samples of the waveform within one frame period; and

converting each of the samples into a corresponding analog signal in response to each sampling signal to thereby generate the musical tone, wherein

the step of operating includes delay step using a pair of memory regions for expanding a delay to the waveform to determine a pitch of the musical tone according to the performance information, the delay step successively writing the samples of the waveform of one musical tone into addresses of one of the memory regions and successively reading the samples from addresses of the same memory regions to thereby create the delay, the delay step responding when the hardware processor is reset so that said one musical tone is switched to another musical tone for successively writing the samples of the waveform of said another musical tone into addresses of the other memory region and successively reading the samples from addresses of the same memory region to thereby create the delay while clearing the one memory region to prepare for a further musical tone.

43. A machine readable media for use in a processor machine including a CPU, said media containing program instructions executable by said CPU for causing the processor machine having submodules composed of software to compute waveforms for performing operation of generating a plurality of musical tones through a plurality of channels according to performance information, wherein the operation comprises the steps of:

setting an algorithm which determines a module composed of selective ones of the submodules logically connected to each other to compute a waveform specific to one of the musical tones;

designating one of the channels to be used for generating said one musical tone in response to the performance information;

loading the selective submodules into said one channel; and

logically executing the loaded selective submodules according to the algorithm so as to compute the waveform to thereby generate said one musical tone through said one channel.

44. A machine readable media according to claim 43, wherein the step of setting sets different algorithms which determine different modules corresponding to different timbres of the musical tones, each of the different modules being composed of selective ones of the submodules which are selectively and sequentially connected to each other to compute a waveform which is specific to a corresponding one of the different timbres.

45. A machine readable media according to claim 43, wherein the step of setting comprises adjusting a number of the submodules to be loaded into the channel dependently on a condition during the course of generating the musical tone.

46. A machine readable media according to claim 43, wherein the step of adjusting comprises compensating the

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module so as to reduce the number of the submodules when the condition indicates that an amplitude envelope of the waveform attenuates below a predetermined threshold level.

47. A machine readable media according to claim 45, wherein the step of adjusting comprises compressing the module so as to reduce the number of the submodules when the condition indicates that an output volume of the musical tone is tuned below a predetermined threshold level.

48. A machine readable media according to claim 45, wherein the step of adjusting comprises eliminating at least one submodule so as to reduce the number of the submodules to be loaded into the channel when the condition indicates that said at least one submodule loses contribution to computation of the waveform without substantially affecting other submodules.

49. A machine readable media for use in a processor machine including a CPU, said media containing program instructions executable by said CPU for causing the processor machine having a software module to compute samples of a waveform in response to a sampling frequency for performing operation of generating a musical tone according to performance information, wherein the operation comprises the steps of:

periodically operating the processor machine to execute the software module for successively computing samples of the waveform corresponding to a variable sampling frequency so as to generate the musical tone; detecting a load of computation imposed on the processor machine during the course of generating the musical tone; and

changing the variable sampling frequency according to the detected load to adjust a rate of computation of the samples.

50. A machine readable media according to claim 49, wherein the step of changing provides a fast sampling frequency when the detected load is relatively light, and provides a slow sampling frequency when the detected load is relatively heavy.

51. A machine readable media for use in a processor machine including a CPU, said media containing program instructions executable by said CPU for causing the processor machine having a software module used to compute samples of a waveform for performing operation of generating a musical tone, wherein the operation comprises the steps of:

variably providing a trigger signal at a relatively slow rate to define a frame period between successive trigger signals;

periodically providing a sampling signal at a relatively fast rate such that a plurality of sampling signals occur within one frame period;

operating the processor machine reactively in response to each trigger signal and operate based on each sam-

pling signal to periodically execute the software module for successively computing a number of samples of the waveform within one frame period;

detecting a load of computation imposed on the processor machine during the course of generating the musical tone;

varying the frame period according to the detected load to adjust the number of the samples computed within one frame period; and

converting each of the samples into a corresponding analog signal in response to each sampling signal to thereby generate the musical tone.

52. A machine readable media for use in a processor machine including a CPU, said media containing program instructions executable by said CPU for causing the processor machine having a software module used to compute samples of a waveform for performing operation of generating a musical tone, wherein the operation comprises the steps of:

periodically providing a trigger signal at a relatively slow rate to define a frame period between successive trigger signals;

periodically providing a sampling signal at a relatively fast rate such that a plurality of sampling signals occur within one frame period;

operating the processor machine reactively in response to a trigger signal and operable based on each sampling signal to periodically execute the software module for successively computing a number of samples of the waveform within one frame; and

converting each of the samples into a corresponding analog signal in response to each sampling signal to thereby generate the musical tone, wherein

the step of operating includes delaying step using a pair of memory regions for imparting a delay to the waveform to determine a pitch of the musical tone according to the performance information, the delay step successively writing the samples of the waveform of one musical tone into addresses of one of the memory regions and successively reading the samples from addresses of the same memory region to thereby cause the delay, the delay step responding when the processor machine is reset so that said one musical tone is switched to another musical tone for successively writing the samples of the waveform of said another musical tone into addresses of the other memory region and successively reading the samples from addresses of the same memory region to thereby cause the delay while clearing the one memory region to prepare for a further musical tone.

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Claim 53 (Amended). A system for synthesizing a musical tone according to control information at a given sampling frequency, comprising:
a processor that executes a process of managing the system;
a memory that memorizes a plurality of parameters corresponding to a plurality of sampling frequencies for use in synthesizing the musical tone;
a detector that detects a load imposed on the processor when the processor executes the process; and
a sound source module that generates a waveform of the musical tone based on the control information at one of the plurality of sampling frequencies selected according to the detected load imposed on the processor, the sound source module reading one of the plurality of parameters corresponding to said selected one of the plurality of sampling frequencies from the memory for use in generating the waveform.

Claim 54 (Amended). The system according to claim 73, wherein the processor manages the system and provides the control information by executing a program.

Claim 55 (Amended). The system according to claim 73, wherein the controller expands the variable period as the detected load of the processor increases.

claims 56-58 (cancelled)

Claim 59 (Amended). A system for synthesizing a musical tone according to control information, comprising:
a processor that executes a process of generating the musical tone based on the control information at a given sampling frequency;
a detector that detects a load imposed on the processor when the processor executes the process; and
a memory that memorizes a plurality of parameters corresponding to a plurality of sampling frequencies for use in generating of the musical tone,
wherein the processor generates a waveform of the musical tone based on the control information at one of the plurality of sampling frequencies selected according to the detected load imposed on the processor, the processor reading one of the plurality of parameters corresponding to said selected one of the plurality of sampling frequencies from the memory for use in generating the waveform.

Claim 60 (Amended). The system according to claim 75, wherein the processor executes the processes according to a program.

Claim 61 (Amended). The system according to claim 74, wherein the controller expands the variable period as the detected load of the processor increases.

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claims 62 – 64 (cancelled)

Claim 65 (Amended). A method of synthesizing a musical tone according to control information at a given sampling frequency by a processor and a sound source module, said method comprising:
operating the processor to execute a process of managing the system;
memorizing a plurality of parameters corresponding to a plurality of sampling frequencies for use in synthesizing the musical tone;
detecting a load imposed on the processor when the processor executes the process; and
operating the sound source module to generate a waveform of the musical tone based on the control information at one of the plurality of sampling frequencies selected according to the detected load imposed on the processor, the sound source module reading one of the plurality of parameters corresponding to said selected one of the plurality of sampling frequencies for use in generating the waveform.

claim 66 (cancelled)

Claim 67 (Amended). A method of synthesizing a musical tone by a processor according to control information, said method comprising:
operating the processor to execute a process of generating the musical tone based on the control information at a given sampling frequency;
detecting a load imposed on the processor when the processor executes the process; and
memorizing a plurality of parameters corresponding to a plurality of sampling frequencies for use in generating of the musical tone,
wherein said step of operating the processor generates a waveform of the musical tone based on the control information at one of the plurality of sampling frequencies selected according to the detected load imposed on the processor, the processor reading one of the plurality of parameters corresponding to said selected one of the plurality of sampling frequencies for use in generating the waveform.

claim 68 (cancelled)

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Claim 69 (Amended). A medium for use in a system having a processor and a sound source module for synthesizing a musical tone according to control information at a given sampling frequency, the medium containing a program executable by the processor for causing the system to perform a method comprising:

processing a load for managing the system;

memorizing a plurality of parameters corresponding to a plurality of sampling frequencies for use in synthesizing the musical tone;

detecting the load imposed on the processor when the processor executes the program; and

operating the sound source module to generate a waveform of the musical tone based on the control information at one of the plurality of sampling frequencies selected according to the detected load imposed on the processor, the sound source module reading one of the plurality of parameters corresponding to the selected one of the plurality of sampling frequencies for use in generating the waveform.

claim 70 (cancelled)

Claim 71 (Amended). A medium for use in a system having a processor for synthesizing a musical tone according to control information, the medium containing a program executable by the processor for causing the system to perform a method comprising:

generating the musical tone based on the control information at a given sampling frequency;

detecting a load imposed on the processor when the processor executes the program; and

memorizing a plurality of parameters corresponding to a plurality of sampling frequencies for use in generating of the musical tone,

wherein said step of generating generates a waveform of the musical tone based on the control information at one of the plurality of sampling frequencies selected according to the detected load imposed on the processor, the processor reading one of the plurality of parameters corresponding to said selected one of the plurality of sampling frequencies for use in generating the waveform.

claim 72 (cancelled)

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Please add claims the following claims:

Claim 73. The system according to claim 53, wherein the processor executes another process of providing the control information to the sound source module at a variable period, the system further comprising a controller that controls the variable period at which the processor provides the control information, according to the detected load of the processor,

Claim 74. The system according to claim 59, wherein the processor executes another process of providing the control information at a variable period, the system further comprising a controller that controls the variable period at which the processor provides control information, according to the detected load of the processor.

Claim 75. The system according to claim 59, wherein the processor further executes a process of managing the system.

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